

08/420,899, filed Apr. 11, 1995, now U.S. Pat. No. 5,677,899, which is a continuation-in-part of U. S. patent application Ser. No. 08/376,882, filed Jan. 25, 1995, which is a continuation-in-part of U.S. patent application Ser. No. 08/105,866, filed Aug. 11, 1993, now abandoned, which is a continuation of U.S. patent application Ser. No. 07/657,155, filed Feb. 15, 1991, now U.S. Pat. No. 2,265,079." Applicant does not claim foreign priority under 35 U.S.C. 119.

Examiner has requested Applicant for a new title. Applicant has submitted herein a new title which is clearly indicative of the invention to which the added claims are directed to.

REMARKS

Upon preparation of formal drawing figures for this case, Applicant became aware of certain non-substantive amendments necessary to conform the drawing figures to the specification. In addition thereto, Applicant believes that moving the original textual matter of the appendices, as originally filed, into the specification is appropriate for purposes of complete disclosure in the specification.

Applicant states, unequivocally, that the attached Substitute Specification includes no new matter whatsoever--either by way of inserted new subject matter or by way of deleted, omitted, or modified original subject matter of material import.

Generally, the specification has been amended to conform the drawing figures to the specification and vice-versa. The specification has been further amended to include original headings found in the appendices as filed. Original textual matter has been moved from the original appendices, as filed, into the Detailed Description section of the specification. This textual matter appears in the specification under the originally disclosed headings found in the appendices as filed. The specification has been further amended to modify

certain stylistic and grammatical usages. Claim 1 has been deleted and claims 17-36 have been added to more particularly and distinctly claim the subject matter of the present invention.

Specifically, Fig. 79 has been relabeled Fig. 79A, since originally only a Fig. 79 and a Fig. 79B were filed. Consistent use of the term "Fig." and "Figs." has been employed throughout the entire specification. In a related manner, capital letters, i.e., "A", "B", "C", etc., in reference to the drawing figures, have been consistently employed throughout the specification and in the corresponding legends on the drawing sheets. The textual matter appearing in original Fig. 99 has been moved into the specification and now appears at page 117, line 32 to page 118, line 5 of the Substitute Specification. The two graphs of original Fig. 61A have been consecutively labeled Figs. 61A and 61B, respectively. Similarly, the two graphs of original Fig. 61B have been consecutively labeled Figs. 61C and 61D, respectively. This relabeling of original Figs. 61A and 61B is considered necessary to accord those separate graphical illustrations with Patent Office drawing regulations and standards. Original Fig. 100a has been subdivided into Figs. 100A(1)-A(2), while original Fig. 100b has been similarly subdivided into Figs. 100B(1)-B(2). The subject matter of original Figs. 100a and 100b has not been amended in any way whatsoever--the sheet split is necessary so as to comply with minimum character height requirements as provided in the Office regulations.

In addition, original Figs. 13A, 13B, 13C, 14A, and 14B were filed as mislabeled among themselves but they were properly characterized in the Brief Description of the Drawing section with the exception that original Fig. 14A was not characterized therein. Applicant has amended the labeling of these Figures so that original Fig. 13A is now Fig. 14A, original Fig. 13B is now Fig. 14B, original Fig. 13C is now Fig. 14C, original Fig. 14B is now Fig. 13, and original Fig. 14A is now Fig. 13A. The Brief Description Of The Drawing section of the

Substitute Specification now includes a description of Fig. 13A, as originally labeled 14A and not described therein as originally filed. A copy of the original Figs. 13A, 13B, 13C, 14A, and 14B with their respective corrected labeling shown in highlighting is submitted herewith. The Substitute Specification has been conformed therewith. The mislabeling of original Figs. 13 and 14 was unintentional and merely a typographical error resulting in a non-substantive informality. Applicant contends that the current correction of this error could not possibly add any new subject matter to this case since all of the subject Figures were originally filed.

For purposes of complete disclosure in the specification, original appendices 1-2, 1-3, 1-4, 1-5, and 2-1 have been moved into the specification. Their original titles have been used as section headings therein. Appendix 1-1, the hex code contained in the subject firmware, has been relabeled Appendix A with consecutive pages numbered A1, A2, A3,...A225. Original Appendix 1-6, the computer program language containing the DSP code, has been relabeled Appendix B with consecutive pages numbered B1, B2, B3,...B56. In particular, original Appendix 1-2 now appears in the specification under the section entitled "Disc Drive SCSI Firmware", page 128 et seq. of the Substitute specification; original Appendix 1-3 now appears in the specification under the section entitled "Drive Exceptions: Status and Error Handling Considerations", page 206 et seq.; original Appendix 1-4 now appears in the specification under the section entitled "Read Ahead Cache", page 215 et seq.; original Appendix 1-5 now appears in the specification under the section entitled "Disc Drive Firmware Architecture" page 223 et seq.; and original Appendix 2-1 now appears in the specification under the heading "Transfer Functions" in consecutive sections entitled "Focus Loop Transfer Function"; and "Compensation Transfer Functions", page 254 et seq. of the Substitute Specification.

Sections indicated as "TBD" or related thereto, have been carried over into the enclosed Substitute Specification. These original sections have not been modified, edited, or deleted in any manner which would raise new matter considerations. These sections are included for purposes of preserving complete original disclosure. Each of the "TBD" matters are design considerations which would not effect one of skill in the art from practicing the present invention as originally enabled and disclosed.

In further connection with the moving of original textual matter from the appendices, as filed, into the specification, original block diagrams appearing as "Figure 1 - Read Mode State Diagram" on page 11 of original Appendix 1-5, and "Figure 2 - Write Mode State Diagram" on page 12 of original Appendix 1-5, have been relabeled Figs. 122 and 123, respectively, and moved into the drawing. Similarly, the five (5) graphs appearing originally in Appendix 2-1, have been consecutively labeled Figs. 124-128 and also moved into the drawing.

As readily apparent from an inspection of the application as filed, original Appendix 1-2, now the specification section entitled "Disc Drive SCSI Firmware", included five appendices identified therein as Appendices A-E. In furtherance of moving the text of the original Appendices into the specification of the present application, original Appendix A of original Appendix 1-2 has been moved into the specification under the heading "A. Firmware Requirements", page 195 et seq. of the enclosed Substitute Specification; original Appendix B of original Appendix 1-2 has been moved into the specification under the heading "B. Post Definition", page 200 et seq.; original Appendix C of original Appendix 1-2 has been moved into the specification under the heading "C. SM330 Registers", page 203 et seq.; original Appendix D of original Appendix 1-2 has been moved into the specification under the heading "D. SM331 Registers", page 204 et seq.; and lastly, original Appendix E of

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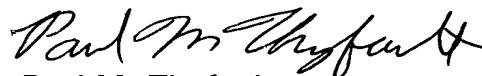
original Appendix 1-2 has been moved into the specification under the heading "E. GLIC Registers" at page 206 of the enclosed Substitute Specification.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application, including the added pending claims 17-36, is in condition for allowance. Every effort has been made to place this application in condition for allowance. Thus, consideration on the merits and early allowance are earnestly requested.

If the Examiner believes that contact with Applicant's attorney would be advantageous toward the disposition of this case, he is herein kindly requested to call Applicant's attorney at the phone number noted below.

Respectfully submitted,

DISCOVISION ASSOCIATES



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